DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008144

Address: 333 Burma Road **Date Inspected:** 07-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Fawen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

OBG & TOWER Components **Bridge No:** 34-0006 **Component:**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 3

Green Tags

The following green tags issued for OBG components after completing the NDT requirements are:

- 1. LD009 008 Green Tag # 010139
- 2. LD001 039 Green Tag # 010127
- 3. LD007 010 Green Tag # 010138
- 4. LD003 052 Green Tag # 010136
- 5. LD004 054 Green Tag # 010135
- 6. LD003 051 Green Tag # 010144
- 7. LD003 053 Green Tag # 010134
- 8. LD001 040 Green Tag # 010128
- 9. LD013 014 Green Tag # 010143
- 10. LD004 051 Green Tag # 010150
- 11. LD003 054 Green Tag # 010132
- 12. LD004 052 Green Tag # 010133
- 13. LD012 020 Green Tag # 010142

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

```
14. LD005 – 010 – Green Tag # 010137
15. LD011 – 020 – Green Tag # 010141
16. LD002 – 040 – Green Tag # 010130
17. LD004 – 053 – Green Tag # 010134
18. LD010 – 008 – Green Tag # 010140
19. LD014 – 014 – Green Tag # 010145
20. LD017 – 021 – Green Tag # 010146
21. LD017 – 022 – Green Tag # 010147
22. LD018 – 021 – Green Tag # 010149
23. LD018 – 022 – Green Tag # 010148
```

BAY 6

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows:

```
1. ESD1 - SA4 - 61 -05
                             - Green Tag # 005861
2. ESD1-DPSA4-13B/B-27
                                 - Green Tag # 005861
3. ESD1-DPSA4-13A/B-04
                                 - Green Tag # 005861
4. ESD1-DPSA4-13B/B-01
                                 - Green Tag # 005861
5. ESD1-DPSA4-13B/B-10; 15; 18
                                   - Green Tag # 005861
                                 - Green Tag # 005862
6. ESD1-DPSA4-12A/B-5
7. ESD1-DPSA4-12B/B-26
                                 - Green Tag # 005862
8. ESD1-SA4-60-05
                             - Green Tag # 005862
9. ESD1-DPSA4-12B/B-02
                                 - Green Tag # 005862
10. ESD1-DPSA4-12B/B-10; 15; 18

    Green Tag # 005862

11. SSD1-DPSA4-7A/B-06
                                  - Green Tag # 005860
12. SSD1-DPSA4-7B/B-01
                                  - Green Tag # 005860
                               - Green Tag # 005860
13. SSD1-SA4-52-06
14. SSD1-DPSA4-7B/B-27
                                  - Green Tag # 005860
15. SSD1-DPSA4-7B/B- 10; 15; 18
                                    - Green Tag # 005860
```

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #7A located on WD1 – A305 – 77M – 3. Welder is identified as 066456. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3212 - Tc - U5b - 1.

SMAW process welding of weld joint #18 located on WD1 – A305 – 77M – 4. Welder is identified as 066459. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2112.

SMAW process welding of weld joint #1B located on WD1 – A305 – 77M – 3. Welder is identified as 066457. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

WPS - B - T - 3212 - Tc - U5b - 1.

SMAW process welding of weld joint #8A located on WD1 – A305 – 65M – 1. Welder is identified as 066481. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3212 - Tc - U5b - 1.

BAY 7

This QA Inspector observed the following work in progress:

SAW process of weld joint #015 located on EP3001 – 001. Welder is identified as 054458. ZPMC QC is identified as Zhang Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T -2221 - B - L2c - S - 2.

SAW process of weld joint #015 located on EP3007 – 001. Welder is identified as 054458. ZPMC QC is identified as Zhang Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T -2221 - B - L2c - S - 2.

BAY8

This QA Inspector observed the following work in progress:

FCAW process of weld joint #001 located on Cross Beam CB202B – 013. Welder is identified as 069118. ZPMC QC is identified as Guo Yan Tei. The welding variables recorded by QC appeared to comply with the WPS – B – T - 2231 - B - U2 - F.

SAW process of weld joint #001 located on Cross Beam CB202F – 013. Welder is identified as 207463. ZPMC QC is identified as Guo Yan Tei. The welding variables recorded by QC appeared to comply with the WPS – B – T - 2221 - B - L2c - S - 2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer